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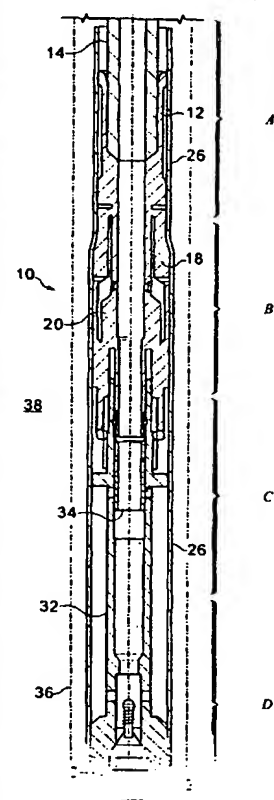
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[Continued on next page]

(54) Title: **APPARATUS FOR RADIALY EXPANDING AND PLASTICALLY DEFORMING A TUBULAR MEMBER**



(57) Abstract: An apparatus (10) for radially expanding and plastically deforming a tubular member (26) with a support member (14), tubular support (12), expansion cone (18), support (20), sliding valve (34), tubular (32), one way poppet valve (30), and shoe (28) in a wellbore (36) at a formation (38) of interest.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/06246

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E21B 23/08

US CL : 166/285, 287, 207, 177.4

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 166/285, 287, 207, 177.4

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,085,838 A (Vercaemer et al.) 11 July 2000 (11.07.2000), whole document	4-8
X	US 5,718,288 A (Bertet et al.) 17 February 1998 (17.02.1998), whole document	10, 11, 13, 15-17, 21, 23, 25-27, 29, 30, 32-34

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

PCT/US04/06246

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

- Box No. III** **Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Form PCT/ISA/210 (continuation of first sheet(2)) (January 2004)